

**Abstract:**

A method for designing a compound capable of binding to the active site or the accessory binding site of RRF protein which comprises evaluating with a computer the chemical entity of RRF protein on the basis of the structure coordinate obtained from RRF protein crystals; and a method for searching a compound capable of inhibiting the activity of RRF protein on the basis of the activity of inhibiting the binding of RRF protein to ribosome or an activity of inhibiting the behavior of RRF protein on ribosome. These methods are useful in clarifying the three-dimensional structure and function mechanism of RRF, thereby contributing to the development of various antibacterial agents, fungicides, herbicides, etc.